

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A particular program detection device for detecting a particular program segment in a program signal including ~~at least~~ audio data of a program, the particular program detection device comprising:

a noise level detecting section operable to detect a noise level of the audio data included in the program signal;

a detection sensitivity determining section operable to determine a detection sensitivity for detecting which is used when a particular program in the program signal is detected, the detection sensitivity being determined based on the noise level detected by the noise level detecting section;

a silent portion detecting section operable to (i) set a threshold value, the set threshold value being a minimum hold value representing a minimum value of the audio data included in the program signal, wherein the set minimum hold value increases over time, (ii) change a rate of the increase of the minimum hold value detect a silent portion of the audio data included in the program signal in accordance with according to the detection sensitivity determined by the detection sensitivity determining section, and (iii) detect a silent portion of the audio data included in the program signal using the set threshold value; and

a particular program determining section operable to determine a time interval between each silent portion detected by the silent portion detecting section to determine [[a]] the particular program segment.

Claim 2 (Currently Amended) The particular program detection device according to claim 1, further comprising:

a noise level learning section operable to learn an association between~~of~~ the noise level currently detected by the noise level detecting section and a previously detected~~with~~ a noise level ~~which has been detected in the past~~; and

a noise level storing section operable to store a learned noise level learned~~learnt~~ by the noise level learning section,

wherein the detection sensitivity determining section determines [[a]]the detection sensitivity ~~which is used when a particular program is detected~~, based on the learned~~learnt~~ noise level stored in the noise level storing section.

Claim 3 (Currently Amended) The particular program detection device according to claim 2,~~further comprising~~

wherein the particular program detection device further comprises a program information obtaining section operable to obtain program information from the program signal,

wherein the noise level storing section stores the learned noise level ~~learnt~~by the noise level learning section in association with the program information obtained by the program information obtaining section, and

wherein the detection sensitivity determining section obtains the ~~learnt~~learned noise level associated with the program information from the noise level storing section in accordance with the program information obtained by the program information obtaining section, and determines the learned~~learnt~~ noise level as [[a]]the detection sensitivity ~~which is to be used when~~ [[a]]the particular program is detected.

Claim 4 (Currently Amended) The particular program detection device according to claim 1, further comprising a broadcast reception section operable to receive broadcast waves carried in the program signal, and operable to output the received program signal to the noise level detecting section and the silent portion detecting section.

Claim 5 (Currently Amended) The particular program detection device according to claim 1, further comprising a data read section operable to read the program signal from a storage device in which the program signal is recorded, and operable to output the read program signal to the noise level detecting section and the silent portion detecting section.

Claim 6 (Cancelled)

Claim 7 (Currently Amended) The particular program detection device according to claim 6, wherein, when [[a]] the particular program is a CM, a time constant, which causes [[a]] the increase of the minimum hold value, to increase is determined, such so that the increase of the minimum hold value is clipped to a predetermined value in 15 seconds, which is a minimum time which can be taken by a CM.

Claim 8 (Currently Amended) A particular program detection method which is executed by a device for detecting a particular program segment in a program signal including at least audio data of a program, the particular program detection method comprising the steps of: detecting a noise level of the audio data included in the program signal;

determining a detection sensitivity for detecting which is used when a particular program in the program signal is detected, the detection sensitivity being determined based on the detected noise level;

setting a threshold value, the set threshold value being a minimum hold value
representing a minimum value of the audio data included in the program signal, wherein the set
minimum hold value increases over time;

changing a rate of the increase of the minimum hold value according to the determined
detection sensitivity;

detecting a silent portion of the audio data included in the program signal using the set
threshold value in accordance with the determined detection sensitivity; and

determining a time interval between each detected silent portion to determine [[a]]the
particular program segment.

Claim 9 (Currently Amended) A non-transitory computer-readable recording medium
having a program recorded thereon, the computer recordable program which causes a particular
causing a program detection device to execute a method of detecting a particular program
segment in a program signal including at least audio data of a program, the method comprising
program causing the particular program detection device to execute the steps of:

detecting a noise level of the audio data included in the program signal;
determining a detection sensitivity for detecting which is used when a particular program in the program signal is detected, the detection sensitivity being determined based on the detected noise level;

setting a threshold value, the set threshold value being a minimum hold value representing a minimum value of the audio data included in the program signal, wherein the set minimum hold value increases over time;

changing a rate of the increase of the minimum hold value according to the determined detection sensitivity;

detecting a silent portion of the audio data included in the program signal using the set threshold value in accordance with the determined detection sensitivity; and

determining a time interval between each detected silent portion to determine [[a]] the particular program segment.

Claim 10 (Currently Amended) An integrated circuit for use in a particular program detection device for detecting a particular program segment in a program signal including ~~at least~~ audio data of a program, wherein the integrated circuit includes circuits functioning as ~~the following sections are integrated:~~

a noise level detecting section operable to detect a noise level of the audio data included in the program signal;

a detection sensitivity determining section operable to determine a detection sensitivity ~~for detecting which is used when a particular program in the program signal is detected, the detection sensitivity being determined based on the noise level detected by the noise level detecting section;~~

a silent portion detecting section operable to (i) set a threshold value, the set threshold value being a minimum hold value representing a minimum value of the audio data included in the program signal, wherein the set minimum hold value increases over time, (ii) change a rate of

the increase of the minimum hold value detect a silent portion of the audio data included in the program signal in accordance with according to the detection sensitivity determined by the detection sensitivity determining section, and (iii) detect a silent portion of the audio data included in the program signal using the set threshold value; and

a particular program determining section operable to determine a time interval between each silent portion detected by the silent portion detecting section to determine [[a]] the particular program segment.